

MARKEA INTERNEXA (Blake) Lundell, comb. nov.

Merinthopodium internexum Blake, Contrib. Gray Herb. 52: 85. 1917.

MARKEA UNIFLORA Lundell, sp. nov.

Frutex scandens; ramulis angulatis, rugulosis, hirsutis, crassiusculis; folia alterna, petiolata, petiolo sulcato, 3--15 mm. longo; lamina chartacea vel subcoriacea, obovata vel elliptica, 4--13 cm. longa, 1.7--6.8 cm. lata, apice obtusiuscula vel abrupte breviterque subacuminata, basi obtusiuscula in petiolum attenuata, integerrima, subconcolor, supra glabra, subtus parce hirsuta, venis lateralibus 5--8-jugis, supra impressis, subtus prominentibus; flores solitarii; pedicelli graciles, parce hirsuti, 4.5--7 cm. longi; sepala 5, ovato-lanceolata, 3.7--4.2 cm. longa, basi usque ad 1.8 cm. lata, obscure trinervia, glabra; corolla usque ad 7.5 cm. longa, parte tubiformi ca. 2 cm. longa, parte campaniformi ca. 3.5 cm. longa, lobis 5, ovatis, ca. 2 cm. longis, rotundatis; filamenta ad basin villosa; antherae exsertae, ca. 1.4 cm. longae; stylus ca. 6 cm. longus; ovarium triloculare, multiovulatum, glabrum. -- MEXICO: Chiapas, Volcan de Tacana, alt. 2800 m., March 27, 1939, Eizi Matuda 2816 (type in the University of Michigan Herbarium). -- M. uniflora is a close relative of M. campanulata (Donn. Sm.) Lundell, a poorly known species described from incomplete material. The flowers of M. uniflora, solitary and apparently terminal, are considerably smaller than those described for M. campanulata.

(a) Papers from the Herbarium of the University of Michigan.

FOUR CENTRAL AMERICAN MELASTOMES

H. A. Gleason

CENTRADENIA GRANDIFOLIA var. BREVISEPALA Gleason, var. nov.

Folia basi uno latere anguste cuneata altero late cuneata, secus venas albo-vittata. Sepala breviter truncata margine minute ciliata.

Type, Stuart 15, collected at Finca Pansamala, Dept. Al-taverapaz, Guatemala, in the herbarium of the University of Michigan. In the typical element of the species, the sepals are ovate-triangular and 1.5--2 mm. long.

LEANDRA LEPIDOTA Gleason, sp. nov.

Frutex, caulibus junioribus, petiolis, venis, inflorescentia et floribus canescenti-lepidotis. Folia magna oblongo-obovata 5-pli-nervia. Hypanthium 10-sulcatum. Calycis limbus subhyalinus ad anthesin in lobos irregulares fissus; dentes exteriores lanceolati erecti. Petala lanceolata acuta. Antherae isomorphae semi-obovatae 2-loculares, poris 2 dehiscentes; connectivum in appendicem lanceolatam productum.

Branching shrub 4 m. high, the younger stems, petioles, principal leaf-veins, inflorescence and flowers densely gray-lepidote with lanceolate scales 0.2 mm. long. Petioles stout, 1--3 cm. long. Blades unequal in each pair, obovate-oblong, 18--32 cm. long, 9--15 cm. wide, abruptly short-acuminate to an obtuse and mucronulate tip, obscurely repand, broadly cuneate at base, 5-pli-nerved, the innermost primaries alternate, 3--7 cm. from the base. Veins plane above, elevated beneath; secondaries nearly straight, 4--6 mm. apart; tertiaries prominulous beneath, obsolete above. Inflorescence terminal, the straight axis bearing several pairs of short lateral branches 5--8 mm. long; flowers 5-merous, sessile in terminal glomerules, subtended by lanceolate bracts 1.5--2 mm. long. Hypanthium subglobose, thick-walled, 2.8 mm. long to the torus, deeply but roundly 10-sulcate. Calyx-tube erect, 0.6 mm. long; calyx-limb very thin and diaphanous, about 1.1 mm. long, sparsely stellate, splitting at anthesis into irregular triangular lobes; exterior teeth erect, lanceolate, acute, 1.6 mm. long. Petals erect, 4.5 mm. long, more or less involute distally, the actual apex incurved, 0.2 mm. long, the exterior tooth erect, 0.4 mm. long. Filaments erect, glabrous, flat, 2.4 mm. long. Anthers radially flattened, 1.6 mm. long; connective prolonged into a basal appendage 0.5 mm. long, lanceolate in the epipetalous series, obscurely 3-lobed in the episepalous. Ovary wholly inferior, 5-celled, its subconic summit glabrous; style glabrous, slender, 3 mm. long; stigma truncate.

In rain forest at Villa Quesada, Prov. Alajuela, Costa Rica, alt. 240 meters, Austin Smith H-1735 (type in the Britton Herbarium at The New York Botanical Garden). Related to L. lasiopetala Cogn., also of Costa Rica, which is glandular-pubescent rather than lepidote.

MICONIA PANAMENSIS Gleason, sp. nov.

Sect. Eumiconia: Rami juniores minutissime furfuracei demum glabrescentes. Petioli crassi 4 mm. longi. Laminae ovato-lanceolatae, usque ad 16 cm. longae 6 cm. latae, longe acuminatae, inferne rotundatae ad basin cordulatam, 3-nerviae, supra glabrae subtus ad venas majores minutissime

stellatae. Inflorescentia pyramidalis, ramis gracilibus inferioribus elongatis; bracteolae triangulares minimae. Flores sessiles 5-meri. Hypanthium campanulatum, ad torum 2 mm. longum, stellato-furfuraceum. Calycis tubus 0.4 mm. longus subrectus; sepala late triangularia 0.6 mm. longa; dentes exteriores conici vix prominuli. Petala alba elliptica equilatera integra 2.6 mm. longa. Stamina dimorpha. Filamenta gracilia glabri 3.5 vel 2.7 mm. longa. Antherae lineares subrectae 2-loculares poro ventrali-terminali dehiscentes, 3.4--3.7 vel 2.6--2.8 mm. longae; connectivum in ser. ext. 0.8 mm. infra thecas productum, in lobos erosos 2 laterales deflexos 1 dorsalem divisum, in ser. int. 0.6 mm. productum, in lobos parvos integros 2 laterales 1 dorsalem productum. Ovarium 3-loculare, semi-inferum, ovulis in quoque loculo paucis ascendentibus; stylus glaber 6 mm. longus; stigma capitellatum.

Type, Wedel 6, from Maccaw Hill, Prov. Bocas del Toro, Panama, in the Britton Herbarium. Related to a small group of South American species, of which M. Chamissois Naud. is best known, in which the connective of the outer series of stamens is expanded into a large cordate structure. Within this group, our species most resembles the Peruvian M. longiracemosa Gl., which (as also M. Chamissois) has plinnerved leaves narrowed to the base.

BLAKEA CALYCOSA Gleason, sp. nov.

Frutex epiphyticus, fruticibus obscure furfuraceis. Petioli crassi, 18--40 mm. longi tenuiter furfuracei. Laminae membranaceae ellipticae, usque ad 24 cm. longae 9 cm. latae, breviter caudato-acuminatae, basi rotundatae, subpeltatae, 3-nerviae jugo submarginali neglecto, supra glabrae, subtus ad venas furfuraceae; venae secundariae alternatim validae debiles. Flores 6-meri, pedicellis 5 mm. longis. Bractee exteriores subpatulae rotundae, extus pubescentes, 11 mm. longae 14 mm. latae, 4 mm. connatae, 3-nerviae, intra glabrae; interiores basi hypanthium amplectentes glabrae, 5 mm. connatae, superne patulae foliaceae, limbo lunato medio 5--6 mm. longo. Hypanthium hemisphaericum 5 mm. altum 8 mm. latum glabrum. Sepala horizontaliter patula ovato-oblonga, a toro 6--7 mm. longa, glabra, apice rotundata appendiculata, appendice foliacea valde reflexa pubescente 7 mm. longa. Petala rosea scathulata obtusa basi late unguiculata, 22 mm. longa, multinervia, utrinque verrucosa, latere uno sparse villosa-ciliata, altero minutissime reflexo-ciliata. Filamenta lata recta 5 mm. longa. Antherae late ellipticae obtusae, 6 mm. longae, poris 2 terminalibus, connectivo in carinam dorsalem elevato, basi in calcarem late conicum obtusum 2 mm. longum productum. Ovarium inferum 6-loculare, summo depressum circa styli basin elevatum. Stylus 14 mm.

longus infra medium glanduloso-hirsutulus; stigma punctiforme.

Type, Allen 1788, from the vicinity of El Valle, Prov. de Coclé, Panama, alt. 600--1000 m., in the Britton Herbarium. In the foliaceous reflexed appendages of the sepals it is quite unlike any other known species of Blakea.

ADDITIONAL NOTES ON THE ERIOCAULACEAE -- II

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The following notes constitute a continuation of the notes published by me in *Phytologia* 1: 309--336.

1. SYNGONANTHUS FLAVIDULUS (Michx.) Ruhl.

The species has been collected in anthesis from February to June and in September. Curiously, Ruhl placed the name Eriocaulon flavidulum Michx. in two places: (1) under Syngonanthus flavidulus, for which it is the name-bringing synonym, and also (2) as a valid species of Eriocaulon [Engl. Pflanzenreich 4³⁰: 33 & 256. 1903]. For the latter he gives as distribution "along banks of streams from Pennsylvania to the Carolinas". Just what he meant by this latter species is doubtful.

Illustrations: Britton & Br. Ill. Fl., ed. 1, 1: f. 902. 1896; ed. 2, 1: 455, f. 1144. 1913; Small, Man. SE. Fl. 257. 1933.

Citations: NORTH or SOUTH CAROLINA: County undetermined: Michaux s.n. (N--photo of type, P--type). SOUTH CAROLINA: Florence Co.: Ravenel s.n. [Florence, 1879] (Mi, T); Beaufort Co.: J. H. Mellichamp s.n. [Bluffton] (Bc). GEORGIA: Charlton Co.: F. Harper s.n. [Floyd's Island] (N); J. S. Harper 161 (N); Emanuel Co.: R. M. Harper 803 (N). FLORIDA: Walton Co.: Mohr s.n. [De Funiac Springs, May 12, 1892] (C); Franklin Co.: Biltmore Herb. 3162a (N); Leon Co.: Berg s.n. [Near Tallahassee] (N); Jefferson Co.: Lighthipe s.n. [Monticello, March, 1891] (N); Alachua Co.: S. J. Knight 2 (C); O'Neill 611 (I), 652 (I); Duval Co.: Curtiss 4140 (C); T. Hogg 8 (C); Lighthipe 173 (N); Clay Co.: W. M. Canby s.n. [Hibernia, March, 1869] (N); C. Skottsberg s.n. [Below Jacksonville & Atlantic Beach] (Go); St. Johns Co.: M. C. Reynolds s.n. [Mar.--July, 1875] (C); Lake Co.: A. S. Hitchcock s.n. [Austis, June--July, 1894] (I); Nash 143 (C, Mi), 1944 (C); Volusia Co.: Lugren s.n. [Volusia] (N); Orange Co.: F. S. Blanton 6491 (I); Huger s.n. [Winter Park, April, 1900]